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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/523,332

07/27/2005

Hitoshi Kimura

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EXAMINER

GADDY, BENJAMIN E

ART UNIT

PAPER NUMBER

4181

MAIL DATE

DELIVERY MODE

11/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/523,332	Applicant(s) KIMURA ET AL.	
	Examiner Benjamin E. Gaddy	Art Unit 4181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/27/2005, 1/28/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "Extracting keywords from multilingual alphabetic and glyph scripts in an electronic programming guide."

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,6,7,12,13,14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (US 6,463,428) in view of Arsenault (US 6,925,650).

Consider claims 1, 7, 13, and 15: Lee discloses an automatic keyword extraction apparatus (**see Col. 1, lines 60-67, where Lee discusses an interface for querying**), comprising: a first extraction unit operable to extract a first keyword from title character string information of contents a first keyword dictionary in which a character string designating a sub-genre is registered (**see Col. 2, lines 29-35, where Lee discusses filtering by genre**); and a second extraction unit operable to extract a keyword from detailed character string information of the contents using a second keyword dictionary in which names of persons are registered,

and to extract a keyword by utilizing a character type separation method (**see Col. 2, lines 30-37, where Lee discusses filtering by actor, therefore a person**).

Lee does not specifically disclose a keyword dictionary, however **Arsenault** discloses a keyword dictionary (**see Col. 2, lines 10-19, where Arsenault discusses a keyword table**). It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Lee, and use a keyword dictionary as taught by **Arsenault**, thus allowing the system to compare the program guide data to the keyword table, as discussed by **Arsenault** (**see Col. 2, lines 11-19**).

Consider claim 14: Lee discloses a system for performing an automatic keyword extraction process (**see Col. 1, lines 60-67, where Lee discusses an interface for querying**), the system comprising: a processor operable to execute instructions (**see Col. 7, lines 10-18, where Lee discusses a programmable computer, therefore a processor**); and instructions for performing the automatic keyword extraction process (**see Col. 7, lines 10-18, where Lee discusses program applications stored on the computer**), the process including: extracting first keyword from title character string information of contents using a first keyword list in which a character string designating a sub-genre is registered (**see Col. 2, lines 29-35, where Lee discusses filtering by genre**); and extracting keyword from detailed character string information of said contents using a second keyword list in which names of persons are registered, and extracting a keyword utilizing a character type separation method (**see Col. 2, lines 30-37, where Lee discusses filtering by actor, therefore a person**).

Lee does not specifically disclose a keyword dictionary, however **Arsenault** discloses a keyword dictionary (**see Col. 2, lines 10-19, where Arsenault discusses a keyword table**). It

would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Lee, and use a keyword dictionary as taught by **Arsenault**, thus allowing the system to compare the program guide data to the keyword table, as discussed by **Arsenault (see Col. 2, lines 11-19)**.

Consider claims 6 and 12: Lee and Arsenault disclose a downloading unit operable to download the second keyword dictionary via a network, wherein the second extraction unit uses the downloaded second keyword dictionary.

3. Claims 2, 4, 8, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (US 6,463,428) in view of Arsenault (US 6,925,650) as applied to claims 1 and 7 above, and further in view of Berger (US 6,415,099).

Consider claims 2 and 8: Lee and Arsenault disclose a first extraction unit extracts the first keyword from a portion within a title character string including a character string registered in the first keyword dictionary (**see Col. 2, lines 29-35, where Lee discusses filtering by genre**) and excluding a character string registered for exclusion (**see Col. 18, lines 25-35, where Arsenault discusses removing common terms**).

Lee and Arsenault do not specifically disclose a predetermined character string dictionary for exclusion, however Berger discloses a predetermined character string dictionary for exclusion (**see Col. 4, lines 15-24, where Berger discusses an exclusion memory**). It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Lee and Arsenault, and use a predetermined character string dictionary for exclusion as taught by Berger, thus defining some words as not keywords because they are not suitable as keywords, as discussed by Berger (**see Col. 4, lines 19-24**).

Consider claims 4 and 10: Lee and Arsenault disclose a second extraction unit extracts a keyword from a portion excluding a character string registered in a dictionary for exclusion utilizing the character type separation method within a remaining portion of the detailed character string information from which a keyword has been extracted by using the second keyword dictionary **(see Col. 2, lines 30-37, where Lee discusses filtering by actor, therefore a person)**.

Lee and Arsenault do not specifically disclose a predetermined character string dictionary for exclusion, however Berger discloses a predetermined character string dictionary for exclusion **(see Col. 4, lines 15-24, where Berger discusses an exclusion memory)**. It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Lee and Arsenault, and use a predetermined character string dictionary for exclusion as taught by Berger, thus defining some words as not keywords because they are not suitable as keywords, as discussed by Berger **(see Col. 4, lines 19-24)**.

4. Claims 3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (US 6,463,428) in view of Arsenault (US 6,925,650) as applied to claims 1 and 7 above, and further in view of Fleming (US 6,449,766).

Consider claims 3 and 9: Lee and Arsenault disclose a first extraction unit extracts as the first keyword a character string separated by a character other than at least one of Hiragana, Katakana, a Chinese character, a numerical character and an alphabet letter from within a title character string which includes a character string registered in the first keyword dictionary **(see Fig. 10 and Col. 17, lines 48-55)**.

Lee and Arsenault do not specifically disclose a character string separated by a special character, however Fleming discloses a character string separated by a special character (**see Col. 10, lines 5-13, where Fleming discusses a separator field**). It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Lee and Arsenault do, and use a character string separated by a special character as taught by Fleming, thus indicating the character used to separate the dimension from the previous dimension, as discussed by Fleming (**see Col. 10, lines 5-8**).

5. Claims 5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (US 6,463,428) in view of Arsenault (US 6,925,650) as applied to claims 1 and 7 above, and further in view of Kanungo (US 5,870,084).

Consider claims 5 and 11: Lee and Arsenault disclose a second extraction unit treats Katakana and an alphabet letter as the same character type when the character type separation method is utilized and at the same time, treats "." (midpoint) as Katakana when a letter just before is Katakana or as an alphabet letter when the letter just before is an alphabet letter. Lee and Arsenault do not specifically disclose Katakana, however Kanungo discloses Katakana (**see Col. 1, lines 50-59**). It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Lee and Arsenault, and use Katakana as taught by Kanungo, thus allowing phonetic spelling in Japanese, as discussed by Kanungo (**see Col. 1, lines 53-56**).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin E. Gaddy whose telephone number is (571) 270-5134. The examiner can normally be reached on M-TH 9am - 4pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Benjamin E. Gaddy

/Benjamin E Gaddy/

Examiner, Art Unit 4181

/Nick Corsaro/

Supervisory Patent Examiner, Art Unit 4181

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